

Macrocera abundare, Meunier. (Mycetophilidæ.)

In Baltic amber, purchased from Mr. Janson. Trichomes of *Quercus* are in the same piece. This is not a typical *Macrocera*; it should perhaps constitute a distinct genus.

Myiolepta lühei, n. sp. (Syrphidæ.)

Probable length about 11 mm., wing 9 mm., or a fraction less; legs rather robust, black, with dark hair; a dark cloud traverses the wing in the region of the forking of veins 2 and 3, and above and below (the same is seen, less developed, in the living *M. varipes*); venation agreeing with *M. varipes*, Lw., in nearly all respects. The following table brings out the venational characters:—

Second vein ending nearer to third than to first

M. bella, Williston.

Second vein ending much nearer to first than to third 1.

1. First posterior cell ending almost on margin of wing;
outer side of discal cell nearly straight; fourth
vein more strongly bent near end of discal cell

M. lühei, n. sp.

First posterior cell ending some little distance from
margin of wing; outer side of discal cell bent in-
wards; fourth vein less strongly bent near end of
discal cell

M. varipes, Lw.

Hab. Baltic (Prussian) amber; in the University Museum at Königsberg.

Boulder, Colorado, U.S.A.: Jan. 1910.

THE CULICIDÆ OF FIJI, INCLUDING TWO NEW SPECIES.

By F. V. THEOBALD, M.A.

Up to the present time only four species of mosquitoes have been recorded from the Fiji Islands, namely, *Stegomyia fasciata*, Fabricius; *S. scutellaris*, Walker; *Culex nocturnus*, Theobald, and *C. fatigans*, Wiedemann.

Mr. F. Jepson, the Government Entomologist, has recently sent me a small consignment which contains two new species, described here.

One of the commonest mosquitoes in Fiji is the Tiger Mosquito (*S. fasciata*). The specimens I have received from the islands are all rather small, but otherwise quite typical. Mr. Jepson writes that this species is supposed to convey dengue fever there. Dr. Bancroft, in Australia, also regards this insect as the transmitter of "dengue."

Culex fatigans, Wiedemann, is also very common, and is probably the species connected with Filariasis.

Culex nocturnus, Theobald (Mono. Culicidæ iii., p. 159), was received from Dr. Hall and taken at Ba, where it was found active at night in houses. It can be told by the abdominal ornamentation, the ground colour deep brown, the base of the second, third, and fourth segments having white bands, the fifth and sixth with white basal median patches, constricted in the middle, the sixth and seventh with narrow apical yellow bands, laterally are median white spots, and the venter is ochreous. The legs have basal pale bands, which are narrow on the fore and mid pairs, broad on the hind, and the ungues of the two front pairs are uniserrate, whilst those of the hind are simple.

These characters will at once separate it from the new species of *Culex*, described here (*C. jepsoni*). The specimens sent were taken in April, May, and June.

With regard to *Stegomyia scutellaris*, Walker, I do not feel certain. Some much rubbed specimens sent me were taken to be that species, but I noticed at the time that there were three more or less parallel white scaled lines on the sides of the thorax. On comparing Mr. Jepson's specimens, I find they are distinct from the true *S. scutellaris* of Walker, and I have described them here as a new species.

The original record of *scutellaris* for these islands was made on some specimens sent to the British Museum by Mr. B. G. Corney (Mono. Culicidæ, iii., p. 144, 1903), who also sent the following note:—"Diurnal mosquito, disappearing entirely at night, taken in a wooden hut five yards from high water line of sea coast, on sandy soil, forest adjoining and high land; locality, Island of Bega."

Walker's species can easily be told by its having the sides with white puncta, not lines, and by the basally white banded abdomen and longer wings; otherwise, the general appearance is very similar.

Culex fatigans, Wiedemann, is the common brown, unbanded-legged household mosquito, which seems to occur like *S. fasciata* all over the tropics and sub-tropics, and on most oceanic islands.

One specimen sent by Mr. Jepson near *Culex jepsoni*, nov. sp., was too damaged to describe, but is apparently distinct, having an ochraceous scaled venter to the abdomen.

Stegomyia pseudoscutellaris, n. sp.

Head black, with white median line and a white patch on each side. Thorax blackish brown, with brown scales, a narrow median white line, a thin white line on each side above pleura, extending lateral from the head to root of wings; pleura bright brown, with one long and one short parallel white lines, which are also parallel with the one above the pleura. Abdomen black, unbanded above, but with curved white spots ending about the middle of the segments; basal white bands ventrally. Legs black, with narrow basal white bands

to the metatarsi and first tarsals on fore and mid pair; the hind with broad basal white bands and the last tarsal all white.

♀. Head black, clothed with flat black and white scales, the latter forming a broad median line and a patch on each side and small white scales around the eyes; chætæ black; the white median area passes well between the eyes. Proboscis and clypeus black; palpi black, the upper surface with snow-white scales for about half



Wing of *Stegomyia pseudoscutellaris*, n. sp., ♀.

their length from the apex; clypeus black, with bronzy sheen and with a transverse carina ending each side in a slight swelling; antennæ black; basal segments black, with silvery white flat scales on the inner side; second segment slightly paler at the base.

Thorax dark brown, with bronzy-brown narrow-curved scales, a narrow median white line extending from the fore border of the mesothorax to the bare space in front of the scutellum; a thin white line on each side between the mesonotum and the pleura composed of small flat scales, extending just past and over the base of the wings; pleura rich brown, with a long thin white line with a small one below it both running parallel to the white line above, composed of flat scales; scutellum brown, with flat white scales; metanotum deep brown. Abdomen deep black, the segments with curved white lateral areas which end in the mid or posterior third of each segment; posterior border-bristles dark; venter black, with prominent basal white bands; legs black, with white basal bands; femora pale at base and below with white apical spots, base of metatarsi and first tarsals of fore and mid legs with narrow basal white bands, other tarsals unbanded, in hind legs basal bands white and broad, the last tarsal all white; ungues all equal and simple.

Wings with rather short fork-cells, the first longer and narrower than the second, its base slightly nearer the base of the wing, its stem about half as long as the cell; stem of the second posterior nearly as long as the cell; posterior cross-vein a little longer than the mid, about twice its own length distant from it; scales brown, and rather dense. Length, 3 to 4 mm.

Hab. Suva, Fiji (F. Jepson).

Observations. Described from three females. This species may easily be mistaken for *S. scutellaris*, Walker, as its general thoracic ornamentation is very similar, but in *scutellaris* there are white puncta on the pleura, in this two white lines, which together with the mesothoracic one, show as three parallel well-

marked lines mentioned in the third volume (p. 144) of my 'Monograph of Culicidæ.' The abdominal ornamentation also



Wing of *Stegomyia scutellaris*, Walker, ♀.

differs and the wings are relatively much shorter, as shown in the figures given here.

Culex jepsoni, n. sp.

Head rich brown, a narrow pale border around the eyes, broadening out laterally. Proboscis black, with a distinct narrow median creamy-white band. Thorax brown, with darker lines and some patches of indistinct paler scales. Abdomen blackish, with basal white bands above and below, the latter broadest. Legs deep brown, with narrow apical and basal pale banding; unguis equal and simple.

♀. Head deep shiny black, with narrow-curved dusky and dull creamy scales, the latter especially forming a narrow border around the eyes which runs at the sides into a dull white scaled area, the whole area (except the flat white scaled lateral patches) with very numerous dusky upright forked scales; a row of long dark chætæ



Wing of *Culex jepsoni*, n. sp., ♀.

project forwards over the eyes. Proboscis jet black, with a narrow median creamy-white band; palpi black; the apex creamy-white and black chætæ; antennæ deep blackish-brown, base of second segment reddish-brown; clypeus black. Thorax deep brown, with a median and sub-median darker lines, clothed with narrow-curved brown and dull golden-brown scales and four indistinct paler scaled spots, almost golden in some lights; chætæ black, with golden reflections at their apices, especially dense and short and thick over the roots of the wings; around the bare space in front of the scutellum are pale scales which spread on to the dark scutellum; posterior border-bristles

long, dark brown, golden reflections apically, eight to the mid lobe; metanotum black; pleuræ dusky, with patches of flat white scales and some golden chætæ, one prominent patch. Abdomen steely black, with dusky black scales and basal white scaled bands and basal white lateral spots, which run a little along the sides of the segments; border-bristles golden, short in the middle, long at the sides; basal segment all dark scaled with two patches of short dusky hairs, golden at their apices and longer ones at the sides of similar hue; venter black, with broad basal white bands.

Legs dark blackish-brown; the fore pair with a small pale spot at the apex of the femora and tibiæ, and a narrow pale band at the junction of the metatarsus and first tarsal; mid legs similar, but traces of banding at the junction of the first and second tarsals as well; hind legs with the narrow banding more pronounced; ungues all equal and simple.

Wings with the fork-cells rather short, the first sub-marginal longer and narrower than the second posterior, its base if anything slightly nearer the apex of the wing, its stem about half the length of the cell; stem of the second posterior also about half the length of the cell; posterior cross-vein longer than the mid, about two and a half times its own length distant from it. Scales brown, dense, median ones of short broad *Teniorhynchus* type, lateral ones straight, narrow, but broader than in *Culex*. Length, 5 mm.

Hab. Suva, Fiji (F. Jepson).

Time of Capture, February 8th, 1910.

Observations. Described from a perfect female, caught by Mr. Jepson in his laboratory. A very distinct species, near to *Culex nocturnus*, Theobald, from the same island, but the ungues being simple, not uniserrate on the fore and mid legs as in that species, at once separate it. In the latter also the abdominal bands bend in the middle, and on some segments do not form actual bands. Nor has *jepsoni* the well-marked median lateral spots seen in *C. nocturnus*.

Another female shows the venter of the abdomen mostly pale scaled, and the pale lateral spots are much larger than in the type, and is probably a distinct species but too damaged to describe.

THE ATHALIA GROUP OF THE GENUS MELITÆA.

By Rev. GEORGE WHEELER, M.A., F.E.S.

(Continued from p. 136.)

BEFORE considering the question of the male genitalia, with special reference to the group before us, it seems to me necessary to make certain observations and to venture certain opinions on the subject at large. There can, I think, be no doubt that the likenesses and differences between these structures are of great phylogenetic value, and are moreover in most cases an important